

Descriptions of two New Genera and four new species of Indian Parasitic Hymenoptera.

By P. Cameron.

1. *Stictocryptus*, gen. nov.

Median segment strongly, closely punctured, with one weak basal transverse keel, the apex broadly rounded; the spiracles small, about 3 times longer than wide. Scutellum prominent, strongly keeled to the top of the apical slope. Abdominal petiole long, slender, the apical half not abruptly widened. Areolet small (but larger than in *Mesostenus*) of equal width, receiving the recurrent nervure in the middle. Transverse median nervure interstitial. Transverse median nervure in hind wings broken in the middle, angled, bullated below. Disco-cubital nervure not broken by a stump. Apex of clypeus broadly rounded. Thorax closely, strongly punctured; the metanotum more strongly than the rest. Apex of abdomen white. Abdominal petiole curved, clearly longer than the 2nd segment.

The type of this genus has not quite the look of a Cryptid. The body is for the greater part rufo-testaceous, with short hyaline wings. The abdominal petiole is more slender than in *Cryptus*, but not so slender as in *Osprynchotus* or *Distantella*. The form of the areolet shows an approach to the *Mesostenini*, it being smaller than in most *Cryptini*; and it is not narrowed in front as in, e.g., *Cryptus*.

1. *Stictocryptus testaceus* sp. nov. ♂

Rufo-testaceous, the apex of scutellum and base of petiole paler, more yellowish; the head black; the sides of the face broadly, a line, widened in the middle, on the sides of the front, a broad line on the outer orbits, the clypeus, mandibles, except at apex, and palpi whitish yellow; the mesopleurae, except narrowly at the base and above, broadly below the tegulae, mesosternum, the base of the metapleurae, narrowly above, the mark becoming gradually widened below; the 4th, 5th, 6th and base of 7th abdominal segment, black; the rest of the 7th white.

Legs coloured like the body, the 4 anterior paler below; the 4 posterior coxae broadly at the base below, the apical half of the hind tibiae, the base of the basal joint of the hind tarsi narrowly, its apex still more narrowly, and the other joints, black; the rest of the metatarsus and the spurs white. Wings short, hyaline, the apex slightly smoky; the stigma and nervures black. — Length 12 mm.

Deesa. September (C. G. Nurse).

Antennae black, slightly brownish below, densely covered with short stiff pubescence; the 3rd joint not much longer than the 4th. Face and clypeus closely, strongly punctured; the apex of the latter fulvous, broadly rounded, depressed; both (as are also the mandibles) thickly covered with white pubescence. Middle of front with a broad, stoutly transversely striated space; the upper part more finely and irregularly striated; the rest of the front and the vertex closely, but not very strongly punctured. Thorax strongly and closely punctured; the metanotum more closely, but as strongly punctured, the punctures not so distinctly punctured. Post-petiole strongly, closely punctured; the middle segments finely punctured.

Phygadeuonini.

2. *Finchra* gen. nov.

Metanotum with 6 areae at the base, in 2 rows of 3; the apical slope without an area; its sides stoutly spined; the spiracles small, oval. Abdominal petiole long and slender, not much dilated at the apex. Parapsidal furrows narrow, but distinct, not reaching to the middle. Areolet large, not much narrowed in front; disco-cubital nervure unbroken, broadly roundly curved; the radius issues from before the middle of the stigma; disco-cubital cellule at base not quite twice the width of the 2nd discoidal cellule at the apex. Transverse median nervure in hind wings broken clearly below the middle. Basal joints of flagellum elongated. Legs long and slender; the hind tibiae curved and narrowed at the base.

The transverse basal nervure is interstitial. There is a small, but distinct tubercle on the face below the antennae. Temples sharply, obliquely narrowed; the occiput is transverse. Legs long and slender, especially the posterior; the hind tarsi are ringed with white. The ♂ is

similar; its abdominal petiole is longer and more slender. On the metanotum is a distinct petiolar area; the areola is large, narrowed to a sharp point at the base; its apex is transverse.

The type of this genus is much more slenderly built than the typical species of the group; the abdominal petiole in particular being longer and more slender, not so dilated at the apex; the petiole, in fact, reminds one of the genus *Osprynchotus*, Spin. or *Bathycrisis* Cam. The whole appearance of the insects is that of the *Cryptini* rather than of the *Phygadeuonini*. It may belong to the *Hemitelini*, but it has a closed areolet, although the 2nd transverse cubital nervure is fainter than the 1st. On the other hand the more slender body, legs and antennae are more as in the *Hemitelini* than in the *Phygadeuonini*.

2. *Finchra gracilis* sp. nov. ♂♀.

Black; the inner orbits somewhat broadly, a line on the base of the prothorax, broadest in the middle, a short line on the apex of the pronotum close to the tegulae, the greater part of the scutellum, the metanotal spines and the apex of the abdomen above, lemon yellow. Legs red; the coxae and trochanters, the apex of the hind tibiae, the basal and the apical two joints of the hind tarsi, black; the 2 middle joints of the hind tarsi, white, as are also the 9th to 13th joints of the antennae. Wings hyaline, the nervures and stigma black. — Length 7 mm; terebra 2 mm.

Simla. September (C. G. Nurse).

Face closely punctured, sparsely covered with white pubescence; the top of the clypeus is more sparsely punctured; its apex smooth, brownish. Mandibles and palpi black. Front and vertex closely punctured. Mesonotum opaque, very finely, and indistinctly punctured. Scutellum smooth and shining. Base of metanotum finely, closely punctured; the rest of it is more strongly and distinctly punctured, the punctures more or less mixed with striae, especially behind the spines and on the apical slope. Pleurae closely punctured, more or less finely reticulated-striated. Tarsi closely spinose, the apices of the joints with long spines.

The ♂ has the face, clypeus, mandibles and malar space pale yellow; the antennal scape is yellow below and the white ring is narrower; the 4 anterior coxae and

trochanters are yellow; almost the apical half of the hind tibiae is black; the apices of the 2nd and 3rd abdominal segments are testaceous; but this may be the case with the ♀. The median segment is more densely covered with long white hair than in the ♀; the spines are darker and not so prominent; the contraction at the base of the hind tibiae is not so well marked.

The keel dividing these 2 areae is roundly curved outwardly; the apical slope is bordered above and laterally by stout keels; on the inner side of the straight, bordering outer keel is a roundly curved one; on the top are a few short, broken keels; the central 2 being longer than the others, they reaching almost to the apex. Mesonotum, except at the apex of the middle lobe, sparsely punctured; the scutellum is more strongly punctured; its basal depression is wide and deep and with a stout keel in the middle; its apex has a stout, rounded keel. Upper part of mesopleurae almost smooth, the lower and the sternum strongly closely punctured; the furrow curved, deep, crenulated. Areolet 4-angled, the transverse cubital nervures separated in front.

Agathinae.

3. *Agathis abuensis* sp. nov. ♂.

Luteous, the hind tibiae, tarsi and calcaria and the antennae, black, the pubescence dense and pale; wings fuscous; the anterior at the base to the transverse median and lower side of transverse basal, the cloud on the fore part of the latter covering it; a cloud, extending from the base of stigma to shortly beyond the areolet, yellowish hyaline; the hind wings yellowish hyaline, the apical fourth clouded, but not so deeply as the anterior wings; the stigma bright luteous. — Length 8—9 mm.

Abu (C. G. Nurse).

Areola square, smooth; it is bordered by a triangular area, the apex of which is at the apex of the areola; outside this is a larger, more irregular area, the apex of which is at the base of the metanotum.

In one example, apparently of this species, the areola is triangular and the other areae differ somewhat in shape. I do not think that much reliance can be placed on the form of the metanotal areae with the *Agathinae* as they appear, in some individuals of the same species, to be better developed than in others.

Cardiochilinae.

4. *Cardiochiles fulvus* sp. nov. ♀.

Fulvous; the vertex and mesonotum of a deeper tint; the antennae, ocellar region and hind tarsi, black; wings almost hyaline, darkened towards the apex, highly iridescent; the stigma except at the base and the apical nervures black; the costa, base of stigma and basal nervures testaceous. Head, pro- and mesothorax smooth, shining, the metanotum more opaque, densely covered with long white pubescence. Post-scutellum wider than long, of equal width, sharply keeled all round and with a keel down the middle forming 2 areas, slightly longer than wide and of almost equal width; areola large, longer than wide; the base obliquely narrowed; from near the base it becomes gradually roundly narrowed to a sharp point at the apex; on either side of its base are 3 areas; the inner oblique, of equal width; the central the larger, its lower side dilated inwardly, the outer narrowed gradually towards the base, the apex open, or at any rate with the apical keel faint; from its inner apical side a keel runs obliquely to join another which runs obliquely from its outer apical margin. Flagellum densely covered with short, black stiff pubescence. Sheaths of ovipositor black, broad, curved, becoming broader towards the apex. Trophi testaceous. The long spur of the hinder tibiae about three-fourths of the length of the metatarsus. — Length 5 mm.

. Deesa. August and September (C. G. Nurse).

On some new Genera and Species of Ichneumonidae from the Himalayas. (Hym.)

By P. Cameron.

The species described in this paper have been kindly given me by Col. C. J. Bingham.

1. *Chlorojoppa* gen. nov.

Scutellum roundly convex, with a long apical slope, the sides keeled from the base to the apex. Metanotum deeply depressed at the base, at the sides clearly separated

from the mesonotum, the latter there being roundly incised; the areola coffin-shaped, more than 3 times longer than wide; there are 2 lateral areae besides the spiracular and 3 on the apical slope; the keels at the sides are dilated, Abdominal petiole broad at the base, clearly broader than the sides are high. Labrum large, projecting. Apex of clypeus transverse. Temples wide, obliquely narrowed; the occiput transverse. Discocubital nervure broken by a stump; transverse median nervure received beyond the transverse basal. Antennae ringed, with white, tapering towards the apex, not serrate. — The colour is metallic green; the petiole becomes gradually widened, the post-petiole not being separated; the gastrocoeli deep, transverse; the 2nd and 3rd segments are separated laterally by a depression, which is reddish in colour. The ventral fold is on the 2nd and 3rd segments; there are 8 segments. Metanotal spiracles linear.

The type of this genus looks more like one of the *Joppini* than any thing else; the broad base of the abdominal petiole separates it from that group and places it with the *Platyuri*. If it were not for the latter characteristic I should certainly have placed it in the *Joppini* if only from the constriction between the base of the metanotum and the post-scutellum. On the other hand there is the fact that in some *Joppini* the base of the 1st abdominal segment is broader than it is high, dorsally ventrally, so that the broad form of the 1st abdominal segment is not a peculiarity of the *Platyuri* alone. I should, therefore, feel inclined to refer the genus to the *Joppini*.

Chlorojoppa viridis sp. nov. ♂. Dark green, metallic; the sides of the face more broadly than the green central part, labrum, base of mandibles, palpi, the upper inner orbits narrowly, tegulae, tubercles, the 4 anterior coxae, trochanters, the lower side of the 4 anterior femora, the base of the 4 anterior tibiae broadly above and entirely below; their tarsi, except the apical joint, more than the basal third of the hind tibiae and the hind tarsi, except the apical joint, yellow. Scape of antennae blue white at the base below, the flagellum black, a broad white ring in the middle. Wings hyaline, the nervures and stigma black. — Length 15 mm.

Darjiling, 7000 feet. March. 19th.

Face and clypeus closely punctured, the former with a distinct apical margin and with an irregular blue mark in the centre at the apex. Sides of front punctured, the

centre transversely striated, the striae becoming narrower below and bordered there by a smooth, shining part. Pro- and mesothorax closely, distinctly, almost uniformly punctured; the scutellum more strongly, not so closely and more irregularly punctured; the apical slope below closely striated. Post-scutellum finely, closely striated; the apex below smooth. Metanotum at the base on the lateral basal areae punctured, more or less reticulated on the inner and outsiders, the apical area on the outer basal part, finely, the inner and apex much more widely reticulated; the posterior median area with a few broken keels on the top, the middle irregularly punctured, the apex smooth; the lateral areae with a few stout oblique keels; the spiracular irregularly stoutly, obliquely striated. Metapleurae strongly, closely punctured. Basal 3 segments of abdomen closely, regularly punctured, the puncturation becoming gradually weaker. Tarsi minutely spinose.

Exochini.

2. *Megatrema* gen. nov.

Metanotum with 2 stout keels, straight and parallel on the basal half, curving round the top of the apical slope, in the centre of which are 2 keels, thinner and converging below; the spiracles are very large, oval, more than twice longer than they are wide in the middle; outside them is a curved keel, which ends in a deep pyriform area. First joint of flagellum longer than the 2nd. First abdominal segment sessile, as long as it is wide at the base; the spiracles placed at the base. Wings with a small, triangular, appendiculated areolet, receiving the recurrent nervure at the apex; the transverse median nervure interstitial; the transverse median nervure in hind wings angled and broken half way between the middle and lower part. Mesonotum and scutellum flat; the abdominal segments without keels. Vertex not separated by a keel.— There is a distinct malar space; the face and clypeus form one piece; temples short, sharply obliquely narrowed. Ocelli in a curve, the hinder separated from each other by double the distance they are from the eyes. The sides of the metanotum at the middle are roundly curved inwardly. Pterostigma longish, not much thicker than the costa; the radius issues from the apex of the basal third. There are 2 large spurs on the hind tibiae, the larger reaching beyond the middle of the metatarsus. Mandibles

broad, with 2 teeth of equal size. Legs stout, as in the rest of the group; the last joint of fore tarsi large, dilated.

This genus should be readily known by the very large elongated metathoracic spiracles.

***Megatrema albopilosa* sp. nov. ♂.**

Black, the basal 14 joints of the antennae and the anterior legs, except the coxae, red, smooth, shining, densely covered with white pubescence; the spurs white; the wings hyaline to the transverse basal and median nervures, fuscous, tinged with violaceous beyond, the nervures and stigma black; the hind wings hyaline, the apex slightly and narrowly smoky. — Length 13 mm.

Sikkim.

Face and clypeus strongly, closely punctured; the hair on them longer and denser than elsewhere; the front and vertex are more closely and finely punctured. Mesonotum and scutellum sparsely, weakly, but still distinctly punctured; scutellar depression deep; on it are 2 stout keels on either side of the middle. Pleurae covered with long white hair; the hairs coming from punctures. Base of metanotum smooth; the apical slope strongly, irregularly punctured; the apex of the central part raised, finely striated, roundly incised above. Below the base of the scutellum are 5 stout, clearly separated oblique keels. Abdomen twice the length of the thorax; its apical segment bluntly pointed, densely covered with black hair. The 4 anterior femora are much more swollen than the posterior. Post-scutellum raised in the middle, depressed widely laterally at the base. The hair on the tibiae and tarsi are densely covered with white pubescence, which gives them a white appearance; the femora are more sparsely covered with longer white hair. (To be continued.)

Neue und wenig bekannte südamerikanische Bienen.

Von C. Schrottky, Villa Encarnación, Paraguay.

(Fortsetzung aus H. 5 p. 316 1906.)

3. *Psaenythia quinquefasciata* n. sp. ♂. Schwarz; Kopf vorn, Pronotum und Abdomen mit gelber Zeichnung. Kopf glänzend, Gesicht fein und zerstreut, Scheitel dicht punktiert. Vorderrand des Clypeus mit breiter, gelber Querbinde, in der Mitte ausgebuchtet, jederseits der Aus-